AMENDMENTS TO THE CLAIMS

Please replace the version of the claims of invention presented by the communication filed February 10, 2004 with the following version of the claims:

1. (Currently Amended) An electrical connector that detachably connects a cable having a metal sheath enclosing a first conductor, to a second conductor, comprising:

a first elongated, tubular, metal housing section having ~~an integral~~ a one-piece longitudinal portion extending from a first end to a second end, the first end having a diameter and a longitudinal length defining a first peripheral surface ~~and having a thickness~~, the second end having a larger diameter and a longer longitudinal length defining a second peripheral surface, with an intermediate tubular conical part extending between the first peripheral surface and the second peripheral surface ~~and having a thickness that is about the thickness of the first end~~, with the diameter at the first end sized to closely receive and prepared to be metallurgically joined to the sheath of the cable carrying the first conductor;

a second elongated, tubular, metal housing section having a first end which is sized to mate with the second end of the first housing section, the second end of the first housing section and the first end of the second housing section having abutting surfaces that are prepared to be mechanically or metallurgically joined, and said second housing section having a second end that

is formed to be detachably connected to a mating second electrical connector; and

an elongated, electrically conductive pin, supported by the second housing section, having a first end designed to electrically connect with the first conductor and a second end that is formed to electrically interface with a complementary electrically conductive pin on a second electrical connector that is electrically connected to the second conductor.

2. (Original) The electrical connector of Claim 1 wherein the first end of the first housing section is constructed to be brazed to the sheath of the cable.

3. (Original) The electrical connector of Claim 1 wherein a mating lap joint is formed between the second end of the first housing section and the first end of the second housing section.

4. (Original) The electrical connector of Claim 3 wherein the mating lap joint is constructed to be brazed.

5. (Original) The electrical connector of Claim 1 where in the connection between the first housing section and the second housing section is a threaded joint.

6. (Original) The electrical connector of Claim 1 wherein the first electrical conductor comprises two electrical leads that are insulated from one another and the electrically conductive pin comprises two parallel, elongated terminals with the first end of each terminal is constructed to connect a

corresponding one of said electrical leads and the second end of each terminal is constructed to mate with a corresponding terminal on the second electrical connector.

7. (Original) The electrical connector of Claim 1 wherein an opening in the sheath of the cable through which the first conductor extends is filled with epoxy.

8. (Original) The electrical connector of Claim 1 including an electrical insulator spacer positioned between the sheath and the elongated, electrically conductive pin.

9. (Original) The electrical connector of Claim 8 wherein the electrical insulator includes a passage through which the first conductor can be threaded.

10. (Original) The electrical connector of Claim 9 wherein the electrical insulator is a ceramic plate.

11. (Original) The electrical connector of Claim 1 wherein the electrically conductive pin is supported by the second end of the second housing section.

12. (Original) The electrical connector of Claim 1 wherein the first end of the electrically conductive pin is a crimp bucket.

13. (Canceled)

14. (Canceled)

15. (Canceled)